December 6, 2007

Mr. Dennis Verrilli
County of San Diego
Department of General Services
Facilities Management Division
5555 Overland Drive, Suite 2207, Building 2, Room 220
San Diego, CA 92123-1294

RE: Edgemoor Facility Demolition Bat Survey

Dear Mr. Verrilli:

On October 30 and 31, 2007, HDR Engineering, Inc. conducted a bat survey of the Edgemoor Facility Demolition project site within County of San Diego property.

The County-owned project site is regionally located in San Diego County within the City of Santee (Figure 1). The County-owned site is approximately five miles northeast of Lake Murray, south of the San Diego River, and northwest of the corner of the intersection of N. Magnolia Avenue and Park Avenue (Figure 2).

The County of San Diego proposes to replace the existing Edgemoor Geriatric Hospital with a new state-of-the-art 160,000 square foot Skilled Nursing Facility that is scheduled for occupancy in early 2009. The project consists of demolition and removal of the existing structures, with the exception of the Polo Barn (Building 10), which would be preserved (Figure 3).

Fourteen species of bats are considered to be sensitive by the County of San Diego; however, only four of these species have the potential to occur within the structures of the Edgemoor Demolition Facility: Yuma myotis (*Myotis yumanensis*), Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), and small-footed myotis (*Myotis ciliolabrum*). The other ten County-sensitive species have specific habitat requirements (e.g., red bats (*Lasiurus blossevillii*) roost exclusively in trees, while western mastiff bats (*Eumops perotis*) require tall vertical cliffs) that would prohibit use of the Edgemoor Facility Demolition site. A historic pallid bat roost was known to occur in “the barn” (it is not clear if the recorded roost was the historic polo barn or the current gardening shop) at the Edgemoor site.

HDR Engineering, Inc.
8690 Balboa Avenue
Suite 200
San Diego, CA 92123
858-712-8400
858-712-8333 (fax)

The bat survey was conducted by Eric Peffer (Wildlife Ecologist) and Allegra Simmons (Environmental Specialist) during the following dates, times, and environmental conditions (Table 1).

Table 1. Survey Dates, Times and Environmental Conditions

Date	Time	Temp (°F)	Cloud Cover	Wind (mph)
30 October 2007	0830-1515	59-74	Overcast to 50%	0-5
31 October 2007	0800-1030	78-96	10%	0-1

All 26 structures slated for demolition were evaluated with regards to evidence of bat use; e.g., presence of guano, urine staining, bat carcasses, discarded insect (prey) remains, and odors associated with bats. The outside of each structure was evaluated for the presence of potential bat habitat (e.g., attic or crawlspace with adequate access). The interiors of structures were examined for bat use where potential habitat was found. Binoculars, spotlights, flashlights, infrared sensitive video cameras, and ultrasonic detectors were used during the survey.

During the bat survey it was determined that the structures typically contained either no bat habitat (i.e., no attics or crawlspaces) or presented no access to the interior of the buildings as the buildings were well maintained with most entry points sealed off (Photograph 1 and 2).

Buildings 7 (Dairy Barn/Men's Ambulatory Ward) and 12 (Vehicle Garage and Garden Shop) and were found to contain signs of bats (Figure 3, Photographs 3 - 8). A few pieces of bat guano were found in the attic to Building 7 (Photographs 3 and 4). The large attic of Building 7 with no insulation and exposed wooden rafters provides for high quality bat habitat (Photograph 4); however, only one possible entry/exit location of limited quality was noted. It is quite possible that the recent (within the last 6 months) re-roofing effort that replaced the plywood and shingles on Buildings 7, 8, and 9 significantly disturbed any bats currently inhabiting building 7 and/or sealed up potential entry/exit points. The lack of recent guano suggests that bats did not inhabit the building during the summer of 2007. Given the limited access and small size of the guano, it is likely that the guano was from a smaller bat such as the Yuma myotis, a sensitive species that commonly is found in man-made structures. No carcasses were found in the guano accumulations to aid in identification.

The garden shop (Building 12) was found to contain two large guano accumulations, one in the center of the building, and one along the northern wall (Photographs 5-8). The open nature of the building (it has several open

vehicle bays with no doors) and high roof with exposed rafters provides high-quality bat habitat with excellent access. The large guano accumulations indicate that bat use has occurred in this building for several years. The size of the guano indicates that medium sized bats inhabited this building. Given the characteristics and size of the guano and the nature of the roost it is likely that the bats were the County-sensitive pallid bat. It is unlikely that County-sensitive Townsend's big-eared bats roost in this building as they are sensitive to human disturbance. Unfortunately, no carcasses were found in the guano accumulations to aid in identification. The lack of fresh guano indicates that bat use of Building 12 may not have occurred during 2007. The presence of raccoon scat within the central guano accumulation suggests that predation of bats inhabiting this roost and scavenging of carcasses beneath the roost may have occurred.

Live bats were not observed in either building that contained guano. This was anticipated since maternity roosts typically are abandoned by the end of October in San Diego County. It is recommended that in order to reduce impacts to any potentially occurring County-sensitive bat species; e.g., Townsend's big-eared bat, pallid bat, Yuma myotis, that pre-construction clearance surveys be conducted in these buildings within one week of the start of demolition. Should any bats be found inhabiting the buildings, demolition should be avoided from March-August in order to avoid impacts to pregnant females or non-volant (i.e., incapable of flight) young. Bats found inhabiting the maternity colony after August may be excluded (allowed to exit the roost but not re-enter) from the roost prior to building demolition.

The remaining 24 buildings associated with the Edgemoor Facility Demolition site did not exhibit any signs of bat use (guano, urine staining, bat carcasses, or live bats). Typically, these buildings either did not have appropriate bat habitat (i.e., dark, elevated, undisturbed areas such as attics) or were well sealed to prevent access by bats.

If you have any questions or need any additional information, please do not hesitate to contact me at (858) 712-8400.

Sincerely,

HDR Engineering, Inc.

Eric Peffer
Wildlife Ecologist

Attachments

HDR | ONE COMPANY *Many Solutions*℠

Memo

To: Dennis Verrilli	
From: Sophia Habl Mitchell	Project: Edgemoor Demolition
CC: Betty Dehoney	
Date: June 5, 2008	Job No: 63610

On June 3, 2008, HDR, Inc. conducted a smooth tarplant (*Centromadia pungens* ssp. *laevis*) survey at the Edgemoor Demolition site. The survey was conducted by Eric Peffer (Wildlife Ecologist) from 1330 to 1500 hours under favorable conditions: 80-81 degrees Fahrenheit, clear skies, and 0-5 miles per hour westerly winds. The survey focused on the proposed area of impact for the demolition project.

Natural (i.e., not landscaped or developed) vegetation occurring within the limits of proposed demolition was surveyed. Non-native grassland is found within the eastern portion of the project area. These non-native grassland areas occurred occasionally along Magnolia Avenue and near the employee apartments and library/microfilm bunker. Smooth tarplant were not detected during the survey. Any potentially occurring smooth tarplant would have been detectable and identifiable given the time of year of the survey. Species occurring in the non-native grassland are indicated below.

Botanical Species Observed Within Non-native Grassland

Scientific Name	Common Name
Ambrosia psilostachya	western ragweed
Amsinckia menziesii	fiddleneck
Anagallis arvensis	scarlet pimpernel
Avena barbata	slender wild oat
Avena fatua	wild oat
Bromus catharticus	rescuegrass
Bromus diandrus	ripgut brome
Bromus madritensis	red brome
Camissonia sp.	suncups
Chamaesyce albomarginata	rattlesnake spurge
Chenopodium alba	tumbleweed
Chenopodium murale	goosefoot
Conyza bonariensis	flax-leaf fleabane
Conyza canadensis	horseweed
Cynodon dactylon	Bermuda grass
Eremocarpus setigerus	quail mullein
Erodium cicutarium	red-stem filaree
Hirschfeldia incana	field mustard
Hordeum jubatum	foxtail barley
Hordeum vulgare	barley
Lactuca serriola	prickly lettuce
Lolium perenne	English ryegrass
Malva parviflora	cheeseweed
Polypogon monspeliensis	rabbitsfoot
Salsola pestifer	Russian thistle
Schinus molle	Peruvian pepper
Schismus barbatus	split grass
Sysimbrium irio	London rocket
Urtica urens	pygmy nettle

Seven coast live oak (*Quercus agrifolia*) are found within the limits of proposed demolition. Six mature (at least 75 year old) oaks occur along Magnolia Avenue –these oaks appear to be in good vigor and are not senescent. One multi-trunked sapling (approximately 5-10 years in age) is found adjacent to the bunker. Four additional oaks along Magnolia Avenue are not located within the proposed demolition area. No other oak trees were identified during the survey